

**LETTER REPORT**  
**DDD ANTHRAX FACILITY SITE**  
**INDIANAPOLIS, MARION COUNTY, INDIANA**

21  
3/14/02

Prepared for:

U.S. ENVIRONMENTAL PROTECTION AGENCY  
Region 5 Emergency Response Branch  
26 West Martin Luther King Drive (Office B-2)  
Cincinnati, OH 45268

TDD No.:	S05-0110-018
Date Prepared:	March 14, 2002
Contract No.:	68-W-00-129
Prepared by:	Tetra Tech EM Inc.
START Project Manager:	John Sherrard
Telephone No.:	(513) 564-8343
U.S. EPA On-Scene Coordinator:	Steve Renninger
Telephone No.:	(513) 569-7539

## CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION .....	1
2.0 BACKGROUND .....	2
2.1 SITE LOCATION .....	2
2.2 SITE HISTORY .....	2
3.0 EMERGENCY RESPONSE AND REMOVAL ACTIVITIES .....	5
3.1 WEDNESDAY, OCTOBER 31, 2001 .....	5
3.2 THURSDAY, NOVEMBER 1, 2001 .....	6
3.3 FRIDAY, NOVEMBER 2, 2001 .....	8
3.4 SATURDAY, NOVEMBER 3, 2001 .....	8
3.5 SUNDAY, NOVEMBER 4, 2001 .....	9
3.6 MONDAY, NOVEMBER 5, 2001 .....	9
3.7 TUESDAY, NOVEMBER 6, 2001 .....	10
3.8 WEDNESDAY, NOVEMBER 7 THROUGH WEDNESDAY, NOVEMBER 14, 2001	11
4.0 SUMMARY .....	12

### Appendix

A	PHOTOGRAPHIC LOG
B	SITE SAMPLING PLAN
C	LIST OF WITNESSES

## FIGURES

<u>Figure</u>	<u>Page</u>
1 SITE LOCATION MAP .....	3

## 1.0 INTRODUCTION

---

The Tetra Tech EM Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START) prepared this letter report in accordance with the requirements of Technical Direction Document (TDD) No. S05-0110-018, assigned to Tetra Tech START by the U.S. Environmental Protection Agency (EPA). The scope of this TDD was to conduct emergency response activities at the DDD Anthrax Facility Site in Indianapolis, Marion County, Indiana. Tetra Tech START was tasked with the following activities:

- (1) Develop a health and safety plan (HASP) for emergency response activities.
- (2) Develop a site sampling plan (SSP) for collecting wipe, swab, and air samples.
- (3) Conduct an extent-of-contamination study in the southern portion of the DDD facility.
- (4) Conduct postdecontamination sampling in the northern portion of the DDD facility.
- (5) Procure a commercial laboratory to analyze split wipe samples from the U.S. Postal Service (USPS) environmental contractor.
- (6) Document site conditions with written and photographic documentation.
- (7) Make recommendations to EPA regarding the threat to public health or the environment based on assessment activities.
- (8) Oversee decontamination of the DDD facility.

Emergency response activities were conducted by Tetra Tech START members John Sherrard, Brad White, Lee Christenson, Jodi McCarty, and Gary Musgrave. This report discusses the site background, emergency response and removal activities, and summary of findings.

## 2.0 BACKGROUND

---

This section describes the location and history of the DDD Anthrax Facility Site.

### 2.1 SITE LOCATION

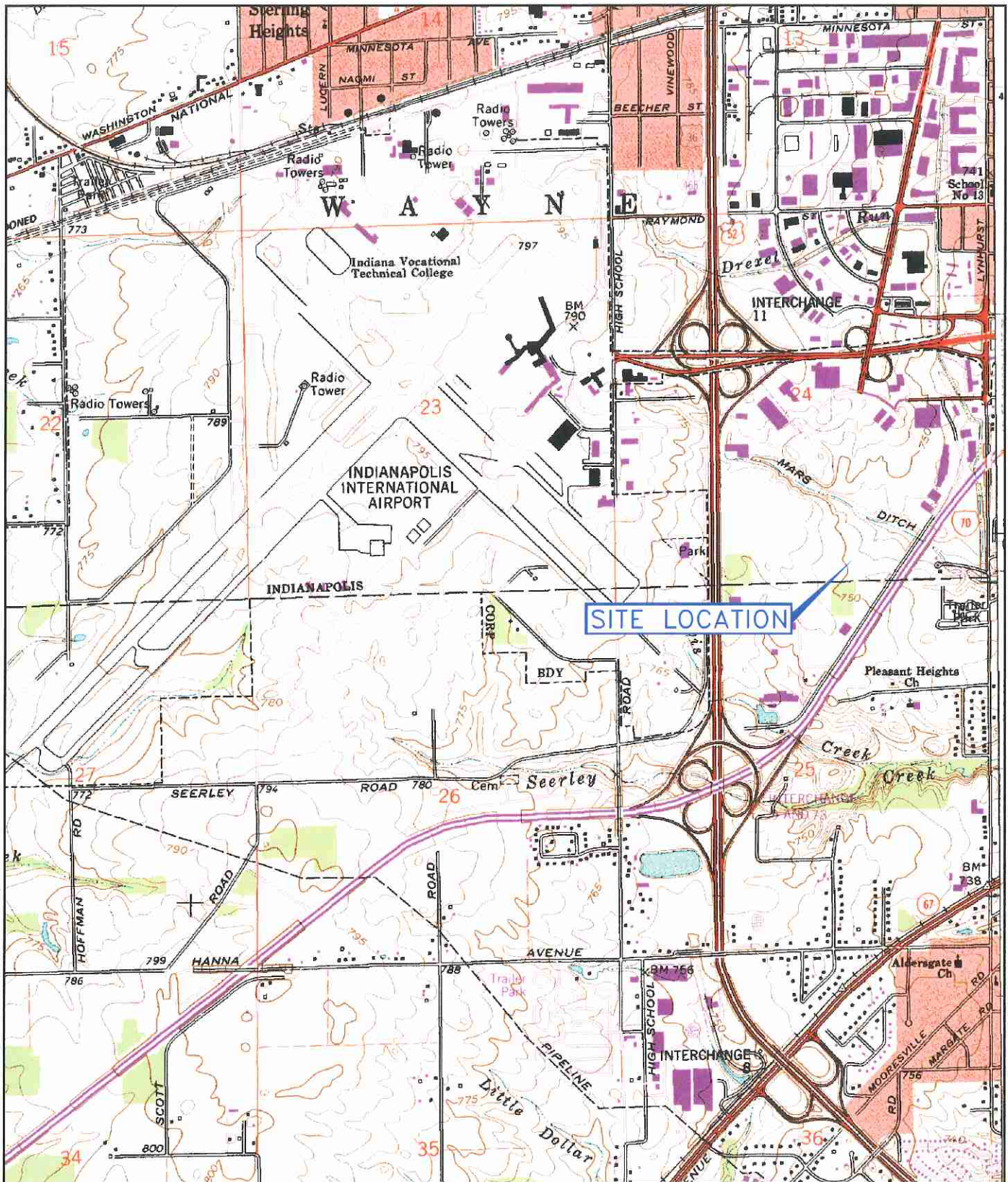
The DDD Anthrax Facility site is located at the DDD Company's (DDD) Critical Parts Center (CPC), 2801 Fortune Circle East Drive, Indianapolis, Indiana (see Figure 1). The geographical coordinates of the site are latitude 39°43'24" north and longitude 86°15'17" west. The site is located in an industrial parkway and is bordered to the west by Fortune Circle East Drive, to the east by Interstate 70 and Lofland Company Midwest, to the north by Welding Therapy Inc., and to the south by a large, multi-tenant industrial complex.

### 2.2 SITE HISTORY

DDD is a USPS contractor, and its CPC repairs and distributes modular components used in mail sorting equipment from post offices across the country. The DDD CPC facility (about 94,000 square feet) is divided into two primary sections, a repair center in the northern portion and a distribution center in the southern portion. See Appendix B, Figure 2 of the SSP (Appendix B).

In October 2001, DDD personnel expressed concerns regarding some of the modular components repaired during October 2001, which originated from USPS post office locations in Trenton, New Jersey, and Washington, DC. Those two locations were documented by EPA and USPS environmental contractors as having *Bacillus anthracis* (anthrax) contamination. DDD closed its CPC facility on October 23, 2001, until sampling and characterization could be performed to determine if anthrax contamination was present within the DDD facility.

On October 26, 2001, the USPS mobilized an environmental consultant, URS, to perform a site assessment of the northern portion of the CPC. URS collected 44 wipe samples from the area of the facility where the modular components were normally handled and repaired. URS sent the samples to a commercial laboratory located in Atlanta, Georgia, for anthrax analysis. 44 samples were collected and 43 showed a negative result for anthrax. One sample showed an inconclusive result.



0 1000 2000  
SCALE IN FEET



DDD FACILITY ANTHRAX SITE  
INDIANAPOLIS, MARION COUNTY, INDIANA  
TDD NO. S05-0110-018

**FIGURE 1**  
**SITE LOCATION MAP**

 Tetra Tech EM Inc.

On October 29, 2001, the Atlanta commercial laboratory contacted the Centers for Disease Control (CDC) and requested additional analysis of the wipe sample that showed an inconclusive result for anthrax. URS stated that the sample had been collected from a damaged mail sorting printer. The damaged printer initially was sent to the DDD facility from a New Jersey post office documented as having anthrax contamination.

On October 30, 2001, NBC news reported that a positive identification for anthrax was found in an Indianapolis, Indiana, company that contracts with USPS to repair mail sorting equipment. On October 31, 2001, EPA and Tetra Tech START mobilized to the DDD Anthrax Facility Site to assess the threat to human health, welfare, and the environment.



### 3.0 EMERGENCY RESPONSE AND REMOVAL ACTIVITIES

---

Emergency response and removal activities were conducted at the DDD Anthrax Facility site from October 31 through November 7, 2001. These activities are discussed in the following sections.

Appendix A contains photographs of site activities.

#### 3.1 WEDNESDAY, OCTOBER 31, 2001

At 1000 hours, EPA On-Scene Coordinator (OSC) Steve Renninger and Tetra Tech START mobilized to Indianapolis, Indiana, and coordinated with Greg Carter from the Indiana Department of Environmental Management (IDEM). They were joined by Phyllis Peden, Matthew Matusiak, Michael Holman, and Jeff Larmore from the Marion County Health Department (MCHD) at the MCHD office. MCHD reviewed all available information to date with EPA and Tetra Tech START. MCHD stated that they were awaiting sample results from CDC on the wipe sample, which showed an inconclusive result for anthrax, and that a meeting between the Federal Bureau of Investigation, Indiana State Department of Health (ISDH), and personnel from USPS currently was being held at another location. EPA requested that representatives from all local, state, and federal agencies have a follow-up meeting in the early afternoon.

MCHD informed EPA that another Indianapolis company, Symbol Tech (ST), had a concern that anthrax contamination inadvertently may have been shipped to its facility. ST is a contractor for Lockheed Martin, which manufactures handheld bar code mail scanners for USPS, Federal Express, and Airborne Express. Earlier in the week, MCHD personnel collected 14 swab samples from the facility and 23 nasal swab samples from ST employees. All samples were analyzed by ISDH and showed negative results for anthrax spores.

At 1330 hours, a meeting was held with EPA, Tetra Tech START, IDEM, MCHD Director Dr. Virginia Caine, MCHD representatives, ISDH, representatives from USPS, DDD General Manager Steve Martin, and a representative from the City of Indianapolis mayor's office. During the meeting, Mr. Martin explained that wipe sampling was conducted by URS on work benches, cleaning areas, filters, initial receiving areas, and individual parts and components in the northern portion of the DDD facility (building Sections A through F). These were locations where the suspected modular components could have been opened and repaired. Mr. Martin indicated that the suspect wipe sample was collected from a mail sorting

printer unit sent from a post office located in Trenton, New Jersey, determined to be contaminated with anthrax. EPA requested the sampling location map from the October 26, 2001, URS sampling event. Mr. Martin indicated that URS did not generate a map indicating sampling locations. Mr. Martin explained that the facility's heating, ventilation, and air conditioning system was turned off and that the DDD facility employed about 102 people. MCHD and ISHD stated that they wanted to perform nasal swab sampling on all DDD employees as well as placing each employee on antibiotics.

At 1415 hours, Jay Butler from CDC in Atlanta, Georgia, informed Dr. Caine that a positive confirmation of a small growth (one colony) of anthrax spores was discovered in the wipe sample from the mail sorting printer. As a result, EPA called its Emergency and Rapid Response Services contractor, Furguson Harbor, to mobilize the EPA mobile command post and tasked Tetra Tech START to mobilize additional personnel to the site.

At 1800 hours, USPS informed EPA that an environmental contractor was called in to decontaminate the northern portion of the DDD facility. USPS indicated that the southern half of the DDD facility (building Sections G through Q) contained unopened, packaged equipment and that no decontamination or sampling activities were planned for that section of the facility. At 1930 hours, EPA and Tetra Tech START demobilized from MCHD.

### **3.2 THURSDAY, NOVEMBER 1, 2001**

At 0900 hours, a meeting was conducted at the La Quinta Conference Center with EPA OSCs Renninger and Brad Stimple, Tetra Tech START, IDEM, MCHD, ISDH, representatives from DDD and USPS, a representative from the City of Indianapolis mayor's office, and the Wayne Township Fire Department (WTFD). USPS specified that its environmental contractor, IT Corporation (IT), and its subcontractor, Summit Environmental Services, Inc. (Summit), would be conducting decontamination activities within the DDD facility. EPA stated that they would have Tetra Tech START perform extent of contamination sampling on the southern portion of the DDD facility, because no sampling had been done. WTFD offered to set up the decontamination line for EPA.



At 1200 hours, two additional Tetra Tech START members arrived on site. EPA tasked Tetra Tech START to characterize the southern half of the DDD facility not sampled by URS. ISDH offered to analyze EPA samples for anthrax analysis.

At 1500 hours, Tetra Tech START completed a SSP (see Appendix B) and a HASP for characterizing the southern portion of the DDD facility. The three Tetra Tech START members had a pre-entry blood draw by a local clinic, who stored the blood samples for possible future analysis. ISDH agreed to supply the culture swabs used to collect the culture swab samples. Tetra Tech START explained that the culture swabs would be used for small areas and that 3- by 3-inch, gauze pad wipe samples would be collected and composited over larger surfaces. The WTFD Hazardous Materials Unit agreed to provide all of the decontamination for the sampling team by mobilizing their decontamination trailer, supplies, personnel, and medical team. At 1600 hours, EPA began conducting daily media briefings (see Photograph No. 1, Appendix A).

From 1900 hours to 2100 hours, three Tetra Tech START members and a representative from USPS entered the facility in Level B personal protective equipment (PPE) to collect wipe and culture swab samples from the southern portion of the DDD facility (see Photograph No. 2, Appendix A). The USPS representative entered the facility to oversee the sampling event. Tetra Tech START collected 52 wipe samples from the concrete floor and 50 culture swab samples from packaged boxes on shelf racks and an air vent (see Photograph Nos 3 and 4, Appendix A). See Appendix A, Figure 3 of the SSP (Appendix B) for sampling locations. Wipe samples were collected by wetting a gauze pad with deionized water and swiping the area using an S-pattern over a five-point composite area of about 25 to 30 square feet. Culture swab samples were collected using the same technique but over a smaller area. All of the samples were placed into labeled Ziploc™ bags. As Tetra Tech START departed the facility, the Ziploc™ bags were decontaminated by WTFD and placed into clean Ziploc™ bags. WTFD coordinated all decontamination activities. Chain-of-custody documentation was completed by Tetra Tech START, and the samples were transferred to the director of ISDH for transportation to its laboratory for anthrax analysis. ISDH stated that analytical results would be confirmed within 48 hours. At 2300 hours, EPA and Tetra Tech START demobilized from the site.

### **3.3 FRIDAY, NOVEMBER 2, 2001**

Three Tetra Tech START members and EPA OSCs Renninger and Stimple were on site and began preparing a sampling plan involving wipe, culture swab, and air samples for the northern portion of the DDD facility after decontamination activities were completed by IT and Summit.

The IT project manager, Mr. Martin, and USPS representatives met with EPA and Tetra Tech START personnel and explained that additional wipe sampling would be conducted on November 3, 2001, in the northern portion of the facility, to determine the extent of contamination and that the wipe samples would be analyzed using the Ruggedized Advanced Pathogen Identification Device (RAPID) system.

The RAPID system detects and identifies various microbes associated with infectious disease and bio-warfare agents. These targets include anthrax, plague, salmonella, tularemia, and others. The RAPID is a field-hardened air thermocycler. It is capable of automatically analyzing samples for the presence of any given deoxyribonucleic acid (DNA) sequence. Software allows the RAPID to automatically collect and interpret data and then report results. The RAPID combines rapid thermal-cycling technology and a real-time fluorimeter to identify test samples. Because thermal cycling detects and amplifies DNA, it is more sensitive and specific than other methods, such as antigen-antibody. The RAPID is fast and capable of analyzing 32 samples in less than 25 minutes.

EPA stated that they would split 26 of IT's wipe samples for verification purposes. The split samples would be sent to a commercial laboratory because ISDH was unable to process additional samples. The laboratory would perform the anthrax analysis by culturing the samples and identifying the growth of anthrax colonies after 24 to 48 hours.

### **3.4 SATURDAY, NOVEMBER 3, 2001**

IT collected 111 wipe samples from the northern portion of the DDD facility building and transported the wipe samples to their office in Knoxville, Tennessee, for analysis using the RAPID system. See Appendix A, Figure 4 of the SSP (Appendix B) for the sampling locations. IT concentrated its sampling locations in areas that most likely contained items that might have anthrax contamination. Tetra Tech START collected 26 split wipe samples for evaluating the accuracy of the RAPID system. Tetra Tech

START procured GEOMET Technologies laboratory in Gaithersburg, Maryland, to analyze the split wipe samples for anthrax analysis. Samples were shipped on Monday, November 5, 2001 (see Photograph No. 5, Appendix A).

### **3.5 SUNDAY, NOVEMBER 4, 2001**

At 1200 hours, Tetra Tech START and EPA OSC Stimple attended a meeting with IT, Summit, and USPS personnel to discuss the decontamination plan for the southern section of the DDD facility. About 30 IT and Summit personnel were mobilized to conduct decontamination activities in 12- hour shifts beginning at 1930 hours. EPA tasked Tetra Tech START to oversee and document decontamination activities within the DDD facility.

ISDH notified EPA OSCs Renninger and Stimple that all 102 wipe and culture swab samples collected by Tetra Tech START in the southern portion of the DDD facility on November 1, 2001, showed negative results for anthrax spores. See Appendix B of the SSP (Appendix B) for a summary of the analytical results.

IT notified EPA that approximately half of the samples collected the previous day from the northern portion of the DDD facility were analyzed using the RAPID system and showed negative results for anthrax spores.

IT and Summit personnel cleaned the southern portion of the DDD facility using a 3 percent bleach solution on the concrete floor and a 5 percent bleach solution on work stations and tabletops (see Photograph No. 6, Appendix A). The personnel decontamination line consisted of four stations: (1) an initial detergent wash and scrub; (2) a 10-minute wash with a 10 percent bleach solution; (3) a 5 percent sodium thiosulfate rinse; and (4) a shower water rinse (see Photograph Nos 7 and 8, Appendix A).

### **3.6 MONDAY, NOVEMBER 5, 2001**

IT reported to EPA that the 111 wipe samples collected from the northern portion of the DDD facility on November 3, 2001, and analyzed using the RAPID system, were all negative for anthrax spores. IT personnel began decontaminating the northern portion of the DDD facility using a 3 percent bleach

solution on the concrete floor and a 5 percent bleach solution on work stations and tabletops. As a precautionary measure, USPS made the conservative decision to wash and dispose of all office personal computers and equipment that may or may not have been contaminated with anthrax spores (see Photograph No. 9, Appendix A). Some of the equipment was confirmed by USPS personnel to have been received from contaminated postal service facilities on the east coast. Items such as electrical components, computer boards, and computer screens were immersed into a 5 percent bleach solution bath for 10 minutes and then placed on a drying line (see Photograph Nos 10 through 12, Appendix A) by IT personnel. The items were then staged into a plastic-lined box trailer for off-site disposal. Items believed to have originated from east coast post offices were double-bagged and staged into the semitruck box trailer.

Tetra Tech START personnel oversaw and documented decontamination activities in the northern portion of the DDD facility in Level C PPE, using powered air-purifying respirators (PAPR).

### **3.7 TUESDAY, NOVEMBER 6, 2001**

IT personnel completed decontaminating the northern portion of the DDD facility using a 3 percent bleach solution on the concrete floor and a 5 percent bleach solution on the work stations and tabletops. In addition, IT personnel completed washing, in a 5 percent bleach solution, computer boards, computer screens, electrical components, and other equipment, as determined by USPS personnel. All items identified by USPS personnel as requiring washing and disposal were staged into a plastic-lined box trailer for off-site disposal (see Photograph No. 13, Appendix A).

Tetra Tech START collected 81 postdecontamination wipe and culture swab samples and 15 air samples in the northern portion of the DDD facility and submitted the samples to ISDH for anthrax analysis (see Photograph Nos 15 through 18, Appendix A). See Appendix A, Figures 5 and 6 of the SSP (Appendix B) for sampling locations. The samples were collected in Level C PPE and PAPRs. Decontamination support was provided by IT and Summit personnel.

### **3.8 WEDNESDAY, NOVEMBER 7 THROUGH WEDNESDAY, NOVEMBER 14, 2001**

On Wednesday, November 7, 2001, EPA, Tetra Tech START, IT, and Summit personnel demobilized from the DDD facility.

On Saturday, November 10, 2001, ISDH contacted EPA and reported that the analytical results from the 81 post decontamination wipe and culture swab samples and 15 air samples all showed negative results for anthrax spores. See Appendix D of the SSP (Appendix B) for a summary of the analytical results. After reviewing the ISDH analytical results, the DDD CPC facility was reopened by MCHD.

On Wednesday, November 14, 2001, Tetra Tech START reported to EPA that the analytical results from the 28 split wipe samples collected from the November 3, 2001, IT wipe sampling event in the northern portion of the DDD facility showed negative results for anthrax spores. The analytical results were identical to the IT analytical results using the RAPID system. See Appendix C of the SSP (Appendix B) for a summary of the analytical results.

## 4.0 SUMMARY

---

From Wednesday, October 31 through Wednesday November 7, 2001, Tetra Tech START mobilized to the DDD Anthrax Facility Site in Indianapolis, Marion County, Indiana, in response to confirmed anthrax contamination within the northern portion of the DDD facility. Tetra Tech START completed the following tasks:

- (1) Developed a HASP for emergency response activities.
- (2) Developed a SSP for collecting wipe, swab, and air samples.
- (3) Conducted an extent-of-contamination study in the southern portion of the DDD facility by collecting 52 wipe and 50 culture swab samples.
- (4) Conducted postdecontamination sampling in the northern portion of the DDD facility by collecting 55 wipe, 25 culture swab, and 15 air samples.
- (5) Procured a commercial laboratory to analyze 26 split wipe samples from IT.
- (6) Documented site conditions with written and photographic documentation.
- (7) Made recommendations to EPA regarding the threat to public health or the environment based on assessment activities.
- (8) Oversaw USPS environmental contractors use 3 percent and 5 percent bleach solution to decontaminate the DDD facility.

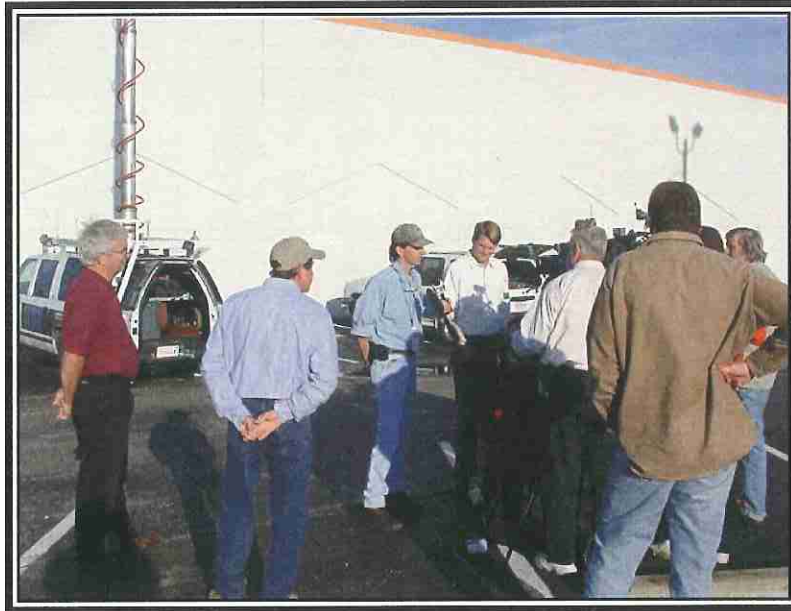
ISDH assisted EPA by analyzing 197 samples for anthrax. All samples analyzed by ISDH showed negative results for anthrax. The 111 wipe samples collected by IT from the northern portion of the building prior to decontamination activities and analyzed by the RAPID system showed negative results for anthrax. In addition, EPA's 26 samples split with IT and analyzed by a commercial laboratory showed negative results for anthrax.

In December 2001, IT transported one box trailer, containing computer screens and components, electrical components, and other equipment, to U.S. Ecology, Grandview, Idaho, for landfill disposal. The items were washed in a 5 percent bleach solution for 10 minutes and dried prior to disposal.

Tetra Tech START does not anticipate any further activities under this TDD.

**APPENDIX A**  
**PHOTOGRAPHIC LOG**  
(Nine Pages)





**Photograph No.:** 1  
**TDD Number:** S05-0110-018  
**Location:** DDD Anthrax Facility Site  
**Subject:** View of EPA OSC conducting the daily 4:00 p.m. media briefing at the site.

**Orientation:** North  
**Date:** November 2, 2001

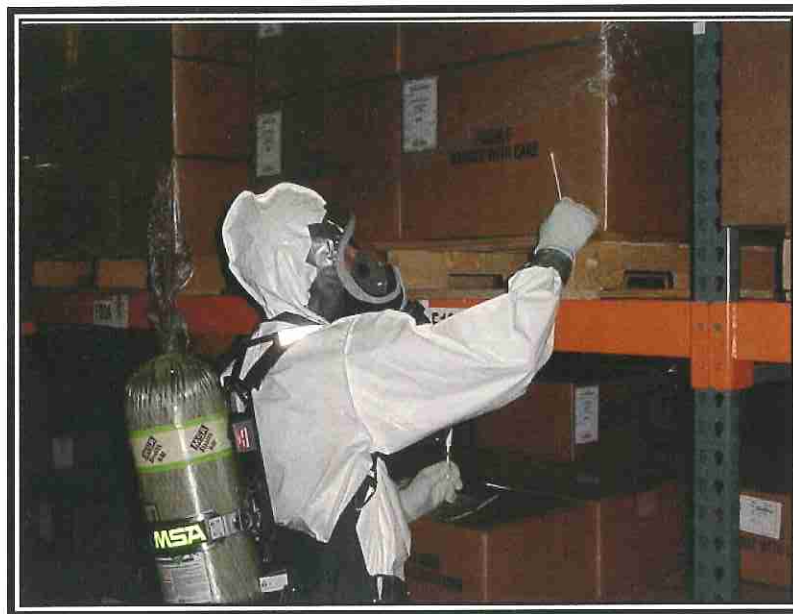


**Photograph No.:** 2  
**TDD Number:** S05-0110-018  
**Location:** DDD Anthrax Facility Site  
**Subject:** View of Tetra Tech START sampling team in Level B PPE.

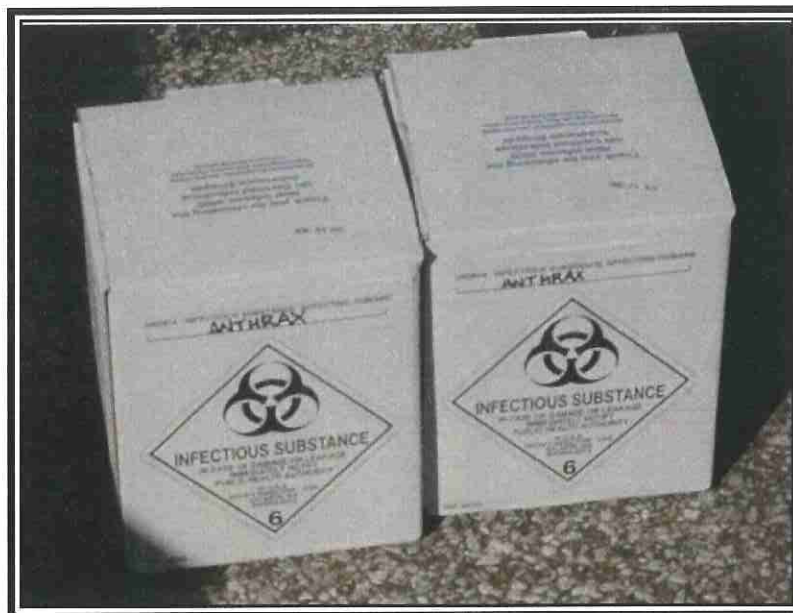
**Orientation:** West  
**Date:** November 1, 2001



**Photograph No.:** 3  
**TDD Number:** S05-0110-018  
**Location:** DDD Anthrax Facility Site  
**Subject:** View of Tetra Tech START collecting a wipe sample in Building Section G.  
**Orientation:** East  
**Date:** November 1, 2001



**Photograph No.:** 4  
**TDD Number:** S05-0110-018  
**Location:** DDD Anthrax Facility Site  
**Subject:** View of Tetra Tech START collecting a culture swab sample in Building Section I.  
**Orientation:** East  
**Date:** November 1, 2001



**Photograph No.:** 5  
**TDD Number:** S05-0110-018  
**Location:** DDD Anthrax Facility Site  
**Subject:** View of Department of Transportation shipping boxes containing wipe samples to be sent to a commercial laboratory for anthrax analysis.

**Orientation:** Downward  
**Date:** November 4, 2001



**Photograph No.:** 6  
**TDD Number:** S05-0110-018  
**Location:** DDD Anthrax Facility Site  
**Subject:** View of IT Corporation mopping the floor with a 3 percent bleach solution.

**Orientation:** West  
**Date:** November 4, 2001





**Photograph No.:** 7  
**TDD Number:** S05-0110-018  
**Location:** DDD Anthrax Facility Site  
**Subject:** View of Summit Environmental Services, Inc., personnel decontaminating a member from the Tetra Tech START sampling team.

**Orientation:** West  
**Date:** November 3, 2001



**Photograph No.:** 8  
**TDD Number:** S05-0110-018  
**Location:** DDD Anthrax Facility Site  
**Subject:** View of the decontamination shower.

**Orientation:** West  
**Date:** November 3, 2001



**Photograph No.:** 9  
**TDD Number:** S05-0110-018  
**Location:** DDD Anthrax Facility Site  
**Subject:** View of electronic and computer components identified by the facility that were disposed because of the potential for anthrax contamination.

**Orientation:** Interior  
**Date:** November 5, 2001



**Photograph No.:** 10  
**TDD Number:** S05-0110-018  
**Location:** DDD Anthrax Facility Site  
**Subject:** View of IT Corporation personnel decontaminating facility items in a bleach solution.

**Orientation:** Interior  
**Date:** November 6, 2001





**Photograph No.:**

11

**TDD Number:**

S05-0110-018

**Location:**

DDD Anthrax Facility Site

**Subject:**

View of decontaminated items placed on the drip line.

**Orientation:** Interior

**Date:** November 6, 2001



**Photograph No.:**

12

**TDD Number:**

S05-0110-018

**Location:**

DDD Anthrax Facility Site

**Subject:**

View of decontaminated items on the drying line. These items were saved by the facility and not disposed of off site.

**Orientation:** West

**Date:** November 6, 2001



**Photograph No.:** 13  
**TDD Number:** S05-0110-018  
**Location:** DDD Anthrax Facility Site  
**Subject:** View of decontaminated items staged in box truck prior to off-site disposal.

**Orientation:** East  
**Date:** November 6, 2001



**Photograph No.:** 14  
**TDD Number:** S05-0110-018  
**Location:** DDD Anthrax Facility Site  
**Subject:** View of the EPA mobile command post.

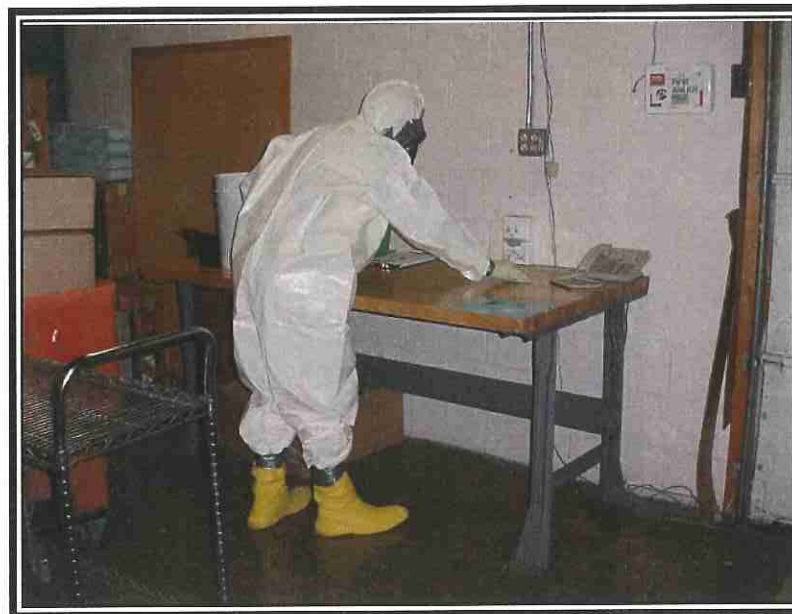
**Orientation:** East  
**Date:** November 6, 2001





**Photograph No.:** 15  
**TDD Number:** S05-0110-018  
**Location:** DDD Anthrax Facility Site  
**Subject:** View of Tetra Tech START collecting a postdecontamination floor wipe sample.

**Orientation:** West  
**Date:** November 7, 2001

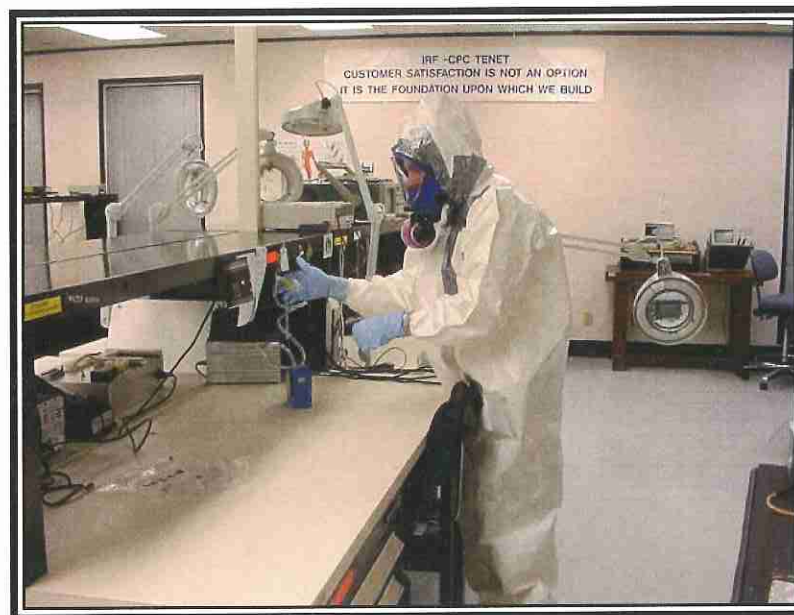


**Photograph No.:** 16  
**TDD Number:** S05-0110-018  
**Location:** DDD Anthrax Facility Site  
**Subject:** View of Tetra Tech START collecting a postdecontamination wipe sample from a work bench.

**Orientation:** West  
**Date:** November 7, 2001



**Photograph No.:** 17  
**TDD Number:** S05-0110-018  
**Location:** DDD Anthrax Facility Site  
**Subject:** View of Tetra Tech START collecting a postdecontamination swab sample from a heating and air conditioning vent.  
**Orientation:** Interior  
**Date:** November 7, 2001



**Photograph No.:** 18  
**TDD Number:** S05-0110-018  
**Location:** DDD Anthrax Facility Site  
**Subject:** View of Tetra Tech START setting up a postdecontamination air sample.  
**Orientation:** West  
**Date:** November 7, 2001



## Tetra Tech EM Inc.

250 W. Court Street, Suite 200W ♦ Cincinnati, Ohio 45202 ♦ (513) 241-0149 ♦ FAX (513) 241-0354

March 14, 2002

Mr. Steve Renninger  
On-Scene Coordinator  
Emergency Response Branch  
U.S. Environmental Protection Agency Region 5  
26 West Martin Luther King Drive  
Office B-2  
Cincinnati, OH 45268

**Subject: Letter Report  
DDD Anthrax Facility Site  
Indianapolis, Marion County, Indiana  
Technical Direction Document No. S05-0110-018  
Tetra Tech Contract No. 68-W-00-129**

Dear Mr. Renninger:

The Tetra Tech EM Inc. Superfund Technical Assessment and Response Team (START) submits the enclosed letter report for the DDD Anthrax Facility Site in Indianapolis, Indiana. If you have any questions or comments about the report or need additional copies, please contact me at (513) 564-8343 or Thomas Kouris at (312) 946-6431.

Sincerely,

John Sherrard  
START Project Manager

Enclosure

cc: Lorraine Kosik, EPA START Project Officer  
Thomas Kouris, Tetra Tech START Program Manager



**APPENDIX B**  
**SITE SAMPLING PLAN**  
(32 Pages)

**SITE SAMPLING PLAN  
DDD ANTHRAX FACILITY SITE  
INDIANAPOLIS, MARION COUNTY, INDIANA**

Prepared for:

**U.S. ENVIRONMENTAL PROTECTION AGENCY  
Region 5 Emergency Response Branch  
26 West Martin Luther King Drive (Office B-2)  
Cincinnati, OH 45268**

TDD No.:	S05-0110-018
Date Prepared:	November 3, 2001
Contract No.:	68-W-00-129
Prepared by:	Tetra Tech EM Inc.
START Project Manager:	John Sherrard
Telephone No.:	(513) 564-8343
U.S. EPA On-Scene Coordinator:	Steve Renninger
Telephone No.:	(513) 569-7539

## CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION .....	1
2.0 BACKGROUND .....	3
2.1 SITE LOCATION .....	3
2.2 SITE HISTORY .....	3
3.0 OBJECTIVES .....	5
3.1 OBJECTIVES .....	5
3.2 SCOPE OF WORK .....	5
3.2.1 Phase I Description .....	5
3.2.1.1 U.S. Environmental Protection Agency Samples .....	5
3.2.1.2 IT Corporation Samples .....	6
3.2.2 Phase II Description .....	6
3.3 SCHEDULE .....	7
4.0 SAMPLING PROCEDURES .....	8
4.1 WIPE SAMPLING .....	8
4.2 CULTURE SWAB SAMPLING .....	9
4.3 AIR SAMPLING .....	10
5.0 SAMPLE ANALYTICAL PARAMETERS .....	11
6.0 QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES .....	12
6.1 FIELD ACTIVITIES .....	12
6.2 SAMPLE DOCUMENTATION AND MANAGEMENT .....	12
6.3 SAMPLE HANDLING AND SHIPMENT .....	12

### Appendix

A	FIGURES
B	PHASE I SAMPLE SUMMARY TABLE
C	PHASE I SPLIT-SAMPLE SUMMARY TABLE
D	PHASE II SAMPLE SUMMARY TABLE

## 1.0 INTRODUCTION

---

Risk-informed decision-making is used to emphasize the fact that cleanup/decontamination decisions are made with input from local, state, and federal representatives. Inherent to all of these factors are interrelated considerations such as contaminate migration, facility use, and the reliability of uncertainty of the data.

Environmental sampling should be conducted by experienced investigators to provide the best opportunity to locate and identify *Bacillus anthracis* (anthrax) spores. The methods employed may include bulk, surface, and air sampling strategies. Initial priority should be given to collected samples in locations that are near suspected release source(s). Subsequent sample collection should be conducted, using a strategy moving outward in concentric circles, to characterize the potential dispersion outside of the immediate zone of release. This strategy is based on the aerodynamic properties of the spores (1 to 5 microns [ $\mu\text{m}$ ]), combined with the aerodynamic properties of the substrate, resulting in deposition around the suspected release source. However, spores also can be disseminated by direct attachment to clothing or other objects.

Bulk samples provide the best opportunity to complete characterization of contaminated building materials. However, extraction of spores from the bulk medium in the laboratory environment can pose exposure concerns to laboratory personnel as well as add bias to the limitations of the extraction method.

Surface samples may be collected by wiping nonporous surfaces with an adsorptive medium that can be subsequently be extracted in the laboratory. There are several adsorptive media available, including BBL Culture swabs and gauze pads. Sterility of these media is critical to ensure that background levels are nonexistent. Wetting of the media is advised to increase adhesion of the spores. As with the media, the wetting agent also should be sterile. Several options exist for wetting agents, including sterile water, saline solution, or phosphate buffer solution. The wetting agent should be selected with input from the laboratory that will receive the samples so as to not interfere with their analytical procedures.

Air sampling can be performed using a variety of methods, including collecting samples on 37-millimeter (mm) mixed cellulose ester (MCE) filters connected to air pumps, providing a calibrated flow rate of 2 liters per minute (L/min). Air sampling should be employed in limited situations and last in the sampling



strategy to provide information that will test a specific hypothesis, such as characterization of spores that may have been aerosolized.

## 2.0 BACKGROUND

---

This section describes the location and history of the DDD Facility Anthrax (DDD) site.

### 2.1 SITE LOCATION

The DDD Site consists of the DDD Company's Critical Parts Center (CPC), located at 2801 Fortune Circle East Drive, Indianapolis, Indiana. Refer to Figure 1 in Appendix A for a site location map. The DDD Site is located in an industrial parkway and is bordered to the west by Fortune Circle East Drive, to the east by Interstate 70 and Lofland Company Midwest, to the north by Welding Therapy Inc., and to the south by a large, multi-tenant industrial complex.

### 2.2 SITE HISTORY

The DDD CPC is a U.S. Postal Service (USPS) contractor that repairs and distributes modular components used in mail sorting equipment in post offices across the country. The building is divided into two primary sections, a repair center in the northern portion and a distribution center in the southern portion. Some of the components received by the DDD CPC facility within the past month originated from USPS facilities located in Trenton, New Jersey, that recently have been found contaminated with anthrax spores. The DDD facility closed its CPC on October 23, 2001, until further site characterization could be performed because of the potential for anthrax contamination.

On October 26, 2001, USPS mobilized its environmental consultant, URS, to perform a site assessment at the DDD Site. URS collected 44 wipe samples from the area of the facility where the modular components were normally handled and repaired. URS sent the samples to a commercial laboratory located in Atlanta, Georgia, for anthrax analysis. A total of 43 of the 44 samples showed negative results for anthrax; one of the samples showed an inconclusive result for anthrax.

On October 29, 2001, the Atlanta laboratory contacted the Centers for Disease Control (CDC) and requested that CDC conduct additional analysis of the sample that showed an inconclusive result for anthrax. The sample had been collected from a printer used in mail sorting. On October 31, 2001, CDC confirmed the presence of a small growth (one colony) of anthrax spores in the sample.

On October 31, 2001, the U.S. Environmental Protection Agency (EPA) and its contractor, the Tetra Tech EM Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START), mobilized to the DDD Site to assess the threat to human health, welfare, and the environment and to provide technical oversight during decontamination activities.

### 3.0 OBJECTIVES

---

This section describes the objectives, scope of work, and tentative schedule of EPA sampling activities conducted at the DDD Site.

#### 3.1 OBJECTIVES

The objectives of EPA sampling activities at the DDD Site are to:

- (1) Determine the extent of potential anthrax contamination in the southern portion of the DDD facility (building Sections G through Q). This will enable the agency to determine if anthrax spores have migrated outside of the source area, and if so, to what extent.
- (2) Perform confirmation wipe, culture swab, and air sampling after decontamination activities are completed by the selected USPS environmental contractor in the northern portion of the DDD facility (building Sections A through F) and, if necessary, in areas of the building within Sections G through Q.

Refer to Figure 2 in Appendix A for a site layout map illustrating the respective building sections.

#### 3.2 SCOPE OF WORK

EPA has developed a two-phased, multi-media approach to best characterize potential anthrax contamination and to ensure effective decontamination of the DDD Site. Phases 1 and 2 are described below:

##### 3.2.1 Phase I Description

This section discusses the initial EPA sampling event and the samples split with IT Corporation (IT).

##### 3.2.1.1 U.S. Environmental Protection Agency Samples

Phase 1 sampling will consist of 52 wipe and 50 swab samples collected from nonporous surfaces at predetermined locations within the distribution center. The wipe samples will be used for non-porous

floor samples, while the swab samples will be reserved for smaller surface areas such as workbenches, equipment racks, heating venting and air conditioning (HVAC) ducts, and desktops. Composite samples will be collected to get a representative sample of each location. Refer to Figure 3 in Appendix A for Phase 1 sampling locations and Appendix B for sample identification (ID) numbers, descriptions, sample media, and sample analytical results.

### **3.2.1.2 IT Corporation Samples**

USPS decontamination contractor IT will collect 111 samples prior to decontamination activities in order to further characterize the extent of contamination within the northern portion of the DDD facility. Samples will be collected using 3- by 3-inch gauze pads, wetted with distilled water. Surfaces will be wiped with the gauze pads, folded, and then placed in a Ziploc™ bag for shipment to the laboratory. Tetra Tech START will collect 26 split samples with IT. Split samples will be collected by using identical sampling media and procedures in various locations throughout the facility. IT will collect two samples in the same designated areas, placing the sampling media side by side, so that each sample is representative of the other. Analysis of the samples will be conducted in separate laboratories to ensure the accuracy of sample collection and analytical procedures. Refer to Figure 4 in Appendix A for Phase 1 split sampling locations and Appendix C for split sample ID numbers, descriptions, sample media, and sample analytical results.

### **3.2.2 Phase II Description**

Following decontamination procedures in building Sections A through F, Phase 2 sampling will consist of Tetra Tech START collecting 55 wipe and 25 culture swab samples from predetermined locations within the northern portion of the DDD facility. Composite samples will be collected to get a representative sample of each location. Areas to be sampled will include nonporous flooring, workbenches, desktops, HVAC intake and exhaust outlets, computer terminals, equipment, file cabinets, window blinds, breakroom tables, and storage racks. Following the wipe and swab sampling, air samples will be collected from 15 predetermined locations over a 6-hour period at an approximate flow rate of 3.25 L/min. Prior to collecting the samples, leaf blowers will be used to circulate air throughout the rooms. By circulating the air within the rooms being sampled, spores that may have settled out likely will be resuspended in the air column. Refer to Figure 5 (swab and wipe samples) and Figure 6 (air samples) in

Appendix A for Phase 2 sampling locations and Appendix D for sample ID numbers, descriptions, sample media, and sample analytical results.

### 3.3 SCHEDULE

Task	Date
Mobilize to DDD Site	October 31, 2001
Prepare Phase 1 Sampling Plan	November 1, 2001
Conduct Phase 1 Sampling in Building Sections G through Q	November 1, 2001
Conduct Phase 1 Split Sampling with IT Corporation	November 3, 2001
Receive Phase 1 Analytical Results from Indiana State Department of Health (ISDH)	November 4, 2001
Prepare Phase 2 Sampling Plan	November 5, 2001
Conduct Phase 2 Swab/Wipe and Air sampling	November 6, 2001
Demobilize from DDD Site	November 7, 2001
Receive Phase 1 Split Sample Analytical Results from GEOMET	November 9, 2001
Receive Phase 2 Swab/Wipe and Air Sample Analytical Results from ISDH	November 9, 2001

## 4.0 SAMPLING PROCEDURES

---

This section describes the sampling procedures that will be used by the sampling team during both phases of the sampling event.

### 4.1 WIPE SAMPLING

**USAGE:** Nonporous flooring

**PROCEDURE:**

- (1) Don sterile, latex, non-powdered exam gloves (over standard N-Dex nitrile gloves).
- (2) Remove sterile 3- by 3-inch gauze pad (or similar) from package.
- (3) Moisten gauze with 1 to 2 milliliters (mL) of deionized (DI) water, sterile saline, laboratory grade water, or phosphate-buffered solution.

*Note:* Sterile saline is a prescription item. Check with the laboratory on which solution is preferred.

- (4) Collect a five-point composite floor wipe (using an S-stroke motion) within a 25- to 30-square-foot area (avoid letting the gauze pad dry completely) and fold the exposed side of pad.

*Note:* The area of the S-stroke should be limited to about 100 square centimeters.

- (5) Place sampled gauze into a Ziploc™ bag or similar.
- (6) Label the Ziploc™ bag or similar.
- (7) Clean the outside of the Ziploc™ bag with alcohol wipes or bleach solution just *prior* to leaving the contaminated or potentially contaminated area.
- (8) Place the cleaned Ziploc™ bag into another Ziploc™ bag.
- (9) To collect another sample, repeat Steps 1 through 8.
- (10) Submit samples to the laboratory for analysis.



## 4.2 CULTURE SWAB SAMPLING

**USAGE:** Small non-porous surfaces or objects such as workbenches, filing cabinets, packaged cardboard boxes, vents, and computer keyboards.

### PROCEDURE:

- (1) Don sterile, latex exam gloves (over standard N-Dex nitrile gloves).
- (2) Remove a sterile BBL CultureSwab (or similar) from package.
- (3) Moisten the BBL CultureSwab with 1 to 2 mL of DI water, sterile saline, laboratory grade water, or phosphate-buffered solution.  
  
*Note:* Sterile saline is a prescription item. Check with the laboratory on which solution is preferred.
- (4) Wipe the surface (avoid letting the gauze pad dry completely) three to four times using an S-stroke pattern within a 10- by 10-centimeter (cm) area (100 cm<sup>2</sup>).
- (5) Place the BBL CultureSwab into the transport tube and cap.
- (6) Label the transport tube and place it into a Ziploc™ bag or similar.
- (7) Clean the outside of the Ziploc™ bag with alcohol wipes or bleach solution just *prior* to leaving the contaminated or potentially contaminated area.
- (8) Place the cleaned Ziploc™ bag into another Ziploc™ bag.
- (9) To collect another sample, repeat Steps 1 through 8.
- (10) Submit samples to laboratory for analysis.

### 4.3 AIR SAMPLING

**USAGE:** Area air sample to determine if suspended spores are present

**PROCEDURE:**

- (1) The sampling train consists of an air pump, Tygon® tubing, and a filter cassette (three-piece cassette with a 37-mm, 0.8-µm pore size, MCE membrane filter).
- (2) Calibrate the sampling train at 2 to 4 L/min.
- (3) Remove the cap from the cassette (retain this for later use), orient the proper flow direction and connect to the pump with the Tygon® tubing, and collect the sample open-faced for a minimum of 6 to 8 hours.
- (4) After sample collection, remove the MCE filter cassette from the sampling train and replace the cap.
- (5) Place the MCE filter cassette into a pre-labeled Ziploc™ bag.
- (6) Clean the outside of the Ziploc™ bag with bleach solution just prior to leaving the contaminated area.
- (7) Place the cleaned Ziploc™ bag into a second Ziploc™ bag.
- (8) Submit samples to the laboratory for analysis.

## 5.0 SAMPLE ANALYTICAL PARAMETERS

---

EPA-collected wipe, culture swab, and air samples will be sent to the Indiana State Department of Health (ISDH) laboratory, located in Indianapolis, Indiana, to be analyzed for anthrax analysis. A turnaround time of 48 hours will be requested.

EPA-split samples collected from IT's Phase I sampling activities within building Sections A through G will be sent to GEOMET Technologies, Inc., 8577 Atlas Drive, Gaithersburg, Maryland, for anthrax analysis. The laboratory turnaround time will be 3 to 5 calendar days. IT will have the Phase I wipe samples collected from the northern portion of the DDD facility sent to its office located in Knoxville, Tennessee, and analyzed by a real-time, biological testing instrument, a Ruggedized Analytical Pathogen Identification Detector (RAPID).

The RAPID system detects and identifies various microbes associated with infectious disease and bio-warfare agents. These targets include anthrax, plague, salmonella, tularemia, and others. The RAPID is a field-hardened air thermocycler. It is capable of automatically analyzing samples for the presence of any given deoxyribonucleic acid (DNA) sequence. Software allows the RAPID to automatically collect and interpret data and then report results. The RAPID combines rapid thermal-cycling technology and a real-time fluorimeter to identify test samples. Because thermal cycling detects and amplifies DNA, it is more sensitive and specific than other methods, such as antigen-antibody. The RAPID is fast and capable of analyzing 32 samples in less than 25 minutes.

## **6.0 QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES**

---

This section describes quality assurance/quality control procedures that will be followed by the sampling team and other field personnel sampling at the DDD site.

### **6.1 FIELD ACTIVITIES**

The sampling team will be familiar with the sampling plan developed for the DDD Site and will follow the sample collection procedures, as discussed in Sections 4.1 through 4.3.

### **6.2 SAMPLE DOCUMENTATION AND MANAGEMENT**

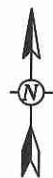
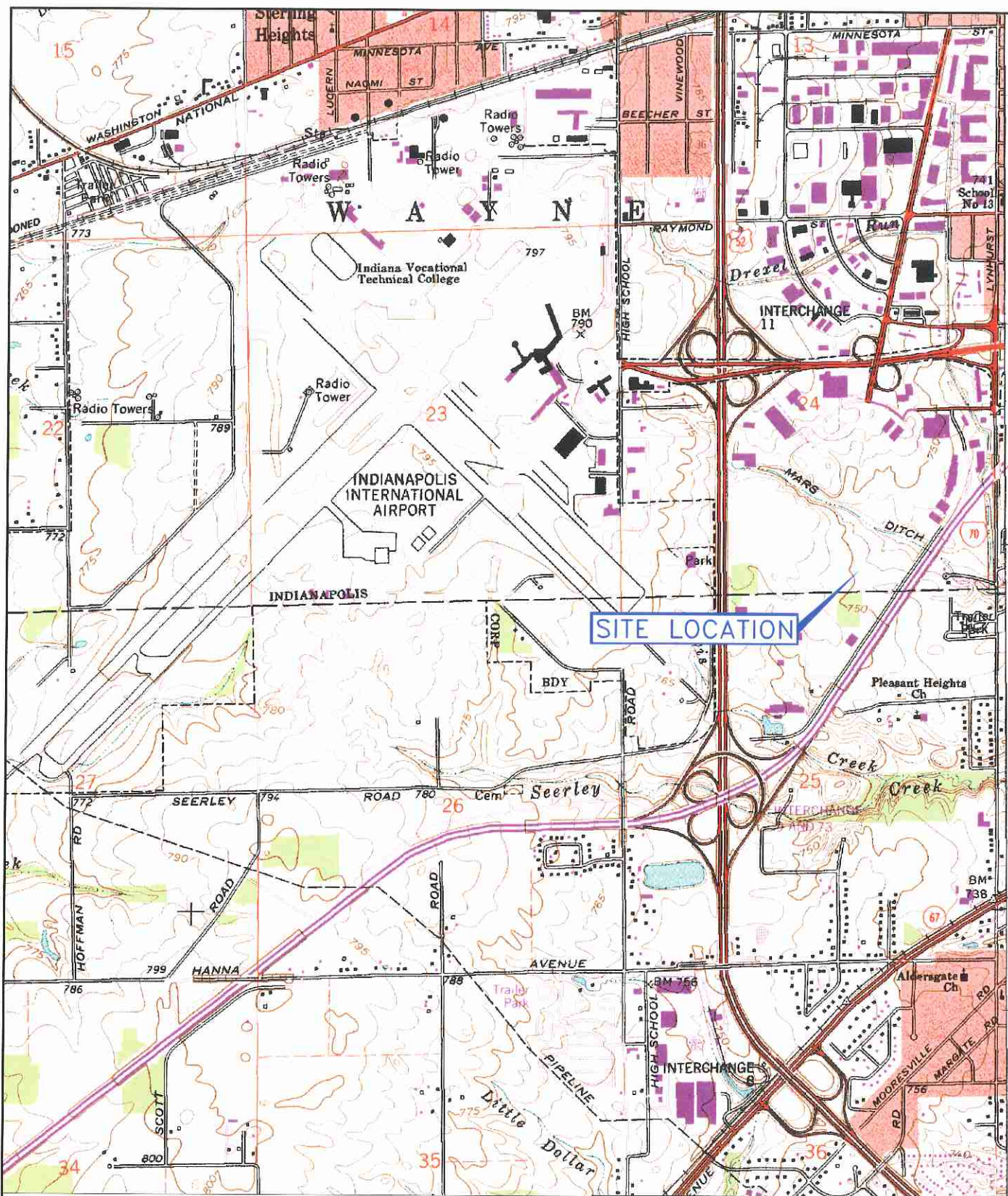
Prior to conducting each sampling event, a pre-labeled Ziploc™ bag will be prepared for each sampling location. Each sample then will be placed into the appropriate bag. After completing a round of sampling and prior to the sample team departing the “hot zone”, the samples will be handed to a decontamination team member (staffed by the Wayne Township Fire Department or Summit Environmental Services, Inc.), who will decontaminate the outside of the Ziploc™ bag with a bleach solution and then place the decontaminated bag inside a second Ziploc™ bag. The samples then will be processed and logged onto a chain-of-custody (COC) record.

### **6.3 SAMPLE HANDLING AND SHIPMENT**

Following the logging of sample information on the COC forms, samples immediately will be delivered to the laboratory for analysis by a representative of ISDH or a Tetra Tech START member or shipped for overnight delivery.

**APPENDIX A**  
**SITE FIGURES**  
(Six Sheets)

G:\G\9009\10110018-DDD ANTHRAX\ FIG 1 SITE LOCATION.dwg 01/30/2002 Mark Kennedy CH



0 1000 2000  
SCALE IN FEET



DDD FACILITY ANTHRAX SITE  
INDIANAPOLIS, MARION COUNTY, INDIANA  
TDD NO. S05-0110-018

**FIGURE 1**  
**SITE LOCATION MAP**

**Tetra Tech EM Inc.**

SOURCE: MODIFIED FROM USGS, BRIDGEPORT, INDIANA QUADRANGLE, 1966, REVISED 1986

**APPENDIX B**  
**PHASE I SAMPLE SUMMARY TABLE**  
(Four Sheets)



**PHASE 1 SAMPLE SUMMARY TABLE  
DDD ANTHRAX FACILITY SITE  
BUILDING SECTIONS G THROUGH Q  
SAMPLES COLLECTED NOVEMBER 1, 2001**

<b>SAMPLE ID</b>	<b>BUILDING LOCATION</b>	<b>SAMPLE TYPE</b>	<b>ISDH ANALYTICAL RESULT</b>
BREAKROOM VENT	Building Section I; Breakroom	Culture Swab	NEGATIVE
GHF-1	Building Section G-H; Eastern Side	Gauze Floor Wipe	NEGATIVE
GHF-2	Building Section G-H; Eastern Side	Gauze Floor Wipe	NEGATIVE
GHF-3	Building Section G-H; Eastern Side	Gauze Floor Wipe	NEGATIVE
GHF-4	Building Section G-H; Eastern Side	Gauze Floor Wipe	NEGATIVE
GHF-5	Building Section G-H; Eastern Side	Gauze Floor Wipe	NEGATIVE
GHF-6	Building Section G-H; Eastern Side	Gauze Floor Wipe	NEGATIVE
GHF-7	Building Section G-H; Eastern Side	Gauze Floor Wipe	NEGATIVE
GHF-8	Building Section G-H; Eastern Side	Gauze Floor Wipe	NEGATIVE
GHF-9	Building Section G-H; Eastern Side	Gauze Floor Wipe	NEGATIVE
GHF-10	Building Section G-H; Eastern Side	Gauze Floor Wipe	NEGATIVE
GHF-11	Building Section G-H; Eastern Side	Gauze Floor Wipe	NEGATIVE
GHF-12	Building Section G-H; Northern Central	Gauze Floor Wipe	NEGATIVE
GHF-13	Building Section G-H; Northern Central	Gauze Floor Wipe	NEGATIVE
GHF-14	Building Section G-H; Western Side	Gauze Floor Wipe	NEGATIVE
GHF-15	Building Section G-H; East of Shelves, adjacent to CPC OPS	Gauze Floor Wipe	NEGATIVE
GHF-16	Building Section G-H; Northeastern Corner	Gauze Floor Wipe	NEGATIVE
GHR-1	Building Section G-H; D02A	Culture Swab	NEGATIVE
GHR-2	Building Section G-H; D04A	Culture Swab	NEGATIVE
GHR-3	Building Section G-H; D13A	Culture Swab	NEGATIVE
GHR-4	Building Section G-H; D18B	Culture Swab	NEGATIVE
GHR-5	Building Section G-H; Bench and Mailboxes	Culture Swab	NEGATIVE
GHR-6	Building Section G-H; CPC OPS Desk	Culture Swab	NEGATIVE
GHR-7	Building Section G-H; C02B	Culture Swab	NEGATIVE
GHR-8	Building Section G-H; C03A	Culture Swab	NEGATIVE
GHR-9	Building Section G-H; C11A	Culture swab	NEGATIVE



**PHASE 1 SAMPLE SUMMARY TABLE (Continued)**  
**DDD ANTHRAX FACILITY SITE**  
**BUILDING SECTIONS G THROUGH Q**  
**SAMPLES COLLECTED NOVEMBER 1, 2001**

SAMPLE ID	BUILDING LOCATION	SAMPLE TYPE	ISDH ANALYTICAL RESULT
GHR-10	Building Section G-H; C15A/B	Culture Swab	NEGATIVE
GHR-11	Building Section G-H; B16A	Culture Swab	NEGATIVE
GHR-12	Building Section G-H; B11B	Culture Swab	NEGATIVE
GHR-13	Building Section G-H; B07B	Culture Swab	NEGATIVE
GHR-14	Building Section G-H; B04A	Culture Swab	NEGATIVE
GHR-15	Building Section G-H; B01B	Culture Swab	NEGATIVE
GHR-16	Building Section G-H; Small Boxes near CPC Carousels	Culture Swab	NEGATIVE
IF-1	Building Section I; Eastern End	Gauze Floor Wipe	NEGATIVE
IF-2	Building Section I; Aisle between Racks E/F, Center	Gauze Floor Wipe	NEGATIVE
IF-3	Building Section I; Aisle between Racks E/F, Western End	Gauze Floor Wipe	NEGATIVE
IF-4	Building Section I; Aisle between Racks G/H, Center	Gauze Floor Wipe	NEGATIVE
IF-5	Building Section I; Doorway in Front of Motherboard Repair	Gauze Floor Wipe	NEGATIVE
IF-6	Building Section I; Inside Door of Breakroom	Gauze Floor Wipe	NEGATIVE
IR-1	Building Section I; Rack E, North-center	Culture Swab	NEGATIVE
IR-2	Building Section I; Rack E, South-center	Culture Swab	NEGATIVE
IR-3	Building Section I; F10B	Culture Swab	NEGATIVE
IR-4	Building Section I; F08A	Culture Swab	NEGATIVE
IR-5	Building Section I; G04C	Culture Swab	NEGATIVE
IR-6	Building Section I; Rack H, Southern End	Culture Swab	NEGATIVE
IR-7	Building Section I; Rack H Southern End	Culture Swab	NEGATIVE
IR-8	Building Section I; Breakroom Table Composite	Culture Swab	NEGATIVE
JKF-1	Building Section J-K; Northeastern Side	Gauze Floor Wipe	NEGATIVE
JKF-2	Building Section J-K; Eastern Side	Gauze Floor Wipe	NEGATIVE
JKF-4	Building Section J-K; Aisle between Racks R/T, Eastern End	Gauze Floor Wipe	NEGATIVE
JKF-5	Building Section J-K; Aisle between Racks R/T, Western End	Gauze Floor Wipe	NEGATIVE
JKF-6	Building Section J-K; Aisle between Racks N/P, Center	Gauze Floor Wipe	NEGATIVE
JKF-7	Building Section J-K; Aisle between Racks L/M, Western End	Gauze Floor Wipe	NEGATIVE

**PHASE 1 SAMPLE SUMMARY TABLE (Continued)**  
**DDD ANTHRAX FACILITY SITE**  
**BUILDING SECTIONS G THROUGH Q**  
**SAMPLES COLLECTED NOVEMBER 1, 2001**

SAMPLE ID	BUILDING LOCATION	SAMPLE TYPE	ISDH ANALYTICAL RESULT
JKF-8	Building Section J-K; Aisle between Racks L/M, Eastern End	Gauze Floor Wipe	NEGATIVE
JKF-9	Building Section J-K; Aisle between Racks J/K, Center	Gauze Floor Wipe	NEGATIVE
JKF-10	Building Section J-K; Doorway of I. S. Tech Center	Gauze Floor Wipe	NEGATIVE
JKR-1	Building Section J-K; Shelving Unit East of Northeastern Ramp	Culture Swab	NEGATIVE
JKR-2	Building Section J-K; Shelving Unit West of Northeastern Ramp	Culture Swab	NEGATIVE
JKR-3	Building Section J-K; Rack J, Center	Culture Swab	NEGATIVE
JKR-4	Building Section J-K; Rack K, Northern End	Culture Swab	NEGATIVE
JKR-5	Building Section J-K; L10A	Culture Swab	NEGATIVE
JKR-6	Building Section J-K; N10C	Culture Swab	NEGATIVE
JKR-7	Building Section J-K; T10D	Culture Swab	NEGATIVE
JKR-8	Building Section J-K; Eastern Side, Bridge	Culture Swab	NEGATIVE
LF-1	Building Section L; Southeastern Corner of CPC Warehouse	Gauze Wipe Sample	NEGATIVE
LF-2	Building Section L; Aisle between Racks U/W, Center	Gauze Wipe Sample	NEGATIVE
LF-3	Building Section L; Aisle between Racks X/Y, Center	Gauze Wipe Sample	NEGATIVE
LF-4	Building Section L; Aisle between Racks X/Y, Southern Side	Gauze Wipe Sample	NEGATIVE
LR-1	Building Section L; W16C	Culture Swab	NEGATIVE
LR-2	Building Section L; W22C	Culture Swab	NEGATIVE
LR-3	Building Section L; Rack Y, Center	Culture Swab	NEGATIVE
MF-1	Building Section M-F; Warehouse, Northeastern Corner	Gauze Floor Wipe	NEGATIVE
MF-2	Building Section M-F; Warehouse, Southern End	Gauze Floor Wipe	NEGATIVE
MF-3	Building Section M-F; Doorway from Warehouse to Purchasing Area	Gauze Floor Wipe	NEGATIVE
MR-1	Building Section M; Purchasing Department, Eastern Office Desk	Culture Swab	NEGATIVE
MR-2	Building Section M; Purchasing Department Hallway, Eastern Filing Cabinets	Culture Swab	NEGATIVE
NOF-1	Building Section N-O; Northeastern Corner	Gauze Floor Wipe	NEGATIVE
NOF-2	Building Section N-O; Southeastern Corner	Gauze Floor Wipe	NEGATIVE
NOF-3	Building Section N-O; Center of Aisle between Racks BB-CC	Gauze Floor Wipe	NEGATIVE

**PHASE 1 SAMPLE SUMMARY TABLE (Continued)**  
**DDD ANTHRAX FACILITY SITE**  
**BUILDING SECTIONS G THROUGH Q**  
**SAMPLES COLLECTED NOVEMBER 1, 2001**

SAMPLE ID	BUILDING LOCATION	SAMPLE TYPE	ISDH ANALYTICAL RESULT
NOF-4	Building Section N-O; Northwestern Corner	Gauze Floor Wipe	NEGATIVE
NOF-5	Building Section N-O; Southwestern Corner	Gauze Floor Wipe	NEGATIVE
NOF-6	Building Section N-O; South Doorway to IRF/POS/IRT	Gauze Floor Wipe	NEGATIVE
NOF-7	Building Section N-O; North Doorway to IRF/POS/IRT	Gauze Floor Wipe	NEGATIVE
NOR-1	Building Section N-O; Rack AA, Western End	Culture Swab	NEGATIVE
NOR-2	Building Section N-O; Rack BB, Middle	Culture Swab	NEGATIVE
NOR-3	Building Section N-O; Rack CC, Southeastern End	Culture Swab	NEGATIVE
NOR-4	Building Section N-O; Speedy Packer Workbench	Culture Swab	NEGATIVE
NOR-5	Building Section N-O; Receiving Workbench	Culture Swab	NEGATIVE
NOR-6	Building Section N-O; Northern Workbench in IRF/POS/IRT	Culture Swab	NEGATIVE
NOR-7	Building Section N-O; Southern Workbench in IRF/POS/IRT	Culture Swab	NEGATIVE
NOR-8	Building Section N-O; Workbench just East of Bathroom	Culture Swab	NEGATIVE
PQF-1	Building Section P-Q; Northeastern Corner	Gauze Floor Wipe	NEGATIVE
PQF-2	Building Section P-Q; Southeastern Corner	Gauze Floor Wipe	NEGATIVE
PQF-3	Building Section P-Q; Center of Aisle between Racks FF-GG	Gauze Floor Wipe	NEGATIVE
PQF-4	Building Section P-Q; Northwestern Corner	Gauze Floor Wipe	NEGATIVE
PQF-5	Building Section P-Q; Southwestern Corner	Gauze Floor Wipe	NEGATIVE
PQF-6	Building Section P-Q; Doorway into Planning Room	Gauze Floor Wipe	NEGATIVE
PQF-7	Building Section P-Q; Doorway into CORT Room	Gauze Floor Wipe	NEGATIVE
PQR-1	Building Section P-Q; Rack EE, Southern End	Culture Swab	NEGATIVE
PQR-2	Building Section P-Q; Rack BB, Middle	Culture Swab	NEGATIVE
PQR-3	Building Section P-Q; Rack GG, Southeastern End	Culture Swab	NEGATIVE
PQR-4	Building Section P-Q; Floor Fan Adjacent to Sampling Location PQR-3	Culture Swab	NEGATIVE
C-1	Gauze Wipe Sample Control (dry)	Gauze Wipe	NEGATIVE
C-2	Gauze Wipe Sample Control (wet)	Gauze Wipe	NEGATIVE
S-1	Culture Swab Control	Culture Swab	NEGATIVE

**APPENDIX C**  
**PHASE I SPLIT-SAMPLE SUMMARY TABLE**  
(One Sheet)

**PHASE 1 SPLIT-SAMPLE SUMMARY TABLE**  
**DDD ANTHRAX FACILITY SITE**  
**BUILDING SECTIONS A THROUGH G**  
**SAMPLES COLLECTED NOVEMBER 3, 2001**

SAMPLE IDENTIFICATION NO.	BUILDING LOCATION	SAMPLE TYPE	IT ANALYTICAL RESULT	EPA (GEOMET) ANALYTICAL RESULT
002	IRF Receiving	Gauze Wipe	NEGATIVE	NEGATIVE
005	Break Room	Gauze Wipe	NEGATIVE	NEGATIVE
011	Hall Outside Hard Drive Room	Gauze Wipe	NEGATIVE	NEGATIVE
020	Mechanical Room	Gauze Wipe	NEGATIVE	NEGATIVE
023	Mechanical Room	Gauze Wipe	NEGATIVE	NEGATIVE
033	IRF Monitor Area	Gauze Wipe	NEGATIVE	NEGATIVE
037	IRF Third Party	Gauze Wipe	NEGATIVE	NEGATIVE
038	IRF Third Party	Gauze Wipe	NEGATIVE	NEGATIVE
039	IRF Third Party	Gauze Wipe	NEGATIVE	NEGATIVE
049	IRF Processing	Gauze Wipe	NEGATIVE	NEGATIVE
060	IRF NRFI Receiving	Gauze Wipe	NEGATIVE	NEGATIVE
068	IRF NRFI Receiving	Gauze Wipe	NEGATIVE	NEGATIVE
070	IRF NRFI Receiving	Gauze Wipe	NEGATIVE	NEGATIVE
075	IRF Warehouse B	Gauze Wipe	NEGATIVE	NEGATIVE
088	Part from Trenton New Jersey/Warehouse A	Gauze Wipe	NEGATIVE	NEGATIVE
089	Far North Aisle in Warehouse A	Gauze Wipe	NEGATIVE	NEGATIVE
091	Far North Aisle in Warehouse A	Gauze Wipe	NEGATIVE	NEGATIVE
095	Far North Aisle in Warehouse A	Gauze Wipe	NEGATIVE	NEGATIVE
098	Far North Aisle in Warehouse A	Gauze Wipe	NEGATIVE	NEGATIVE
099	Far North Aisle in Warehouse A	Gauze Wipe	NEGATIVE	NEGATIVE
101	Far North Aisle in Warehouse A	Gauze Wipe	NEGATIVE	NEGATIVE
107	8- by 12-inch Return Air Duct outside of Hard Drive Room	Gauze Wipe	NEGATIVE	NEGATIVE
108	8- by 12-inch Air Supply Duct outside of Hard Drive Room	Gauze Wipe	NEGATIVE	NEGATIVE
109	Large air supply in IRF Tech Room	Gauze Wipe	NEGATIVE	NEGATIVE
110	Air Return by Suite H Door	Gauze Wipe	NEGATIVE	NEGATIVE
111	12- by 24-inch Air Return inside IRF Monitor Room	Gauze Wipe	NEGATIVE	NEGATIVE

**APPENDIX D**  
**PHASE II SAMPLE SUMMARY TABLE**  
(Four Sheets)

**PHASE II SAMPLE SUMMARY TABLE  
DDD ANTHRAX FACILITY SITE  
BUILDING SECTIONS A THROUGH H  
SAMPLES COLLECTED NOVEMBER 6, 2001**

<b>SAMPLE IDENTIFICATION NO.</b>	<b>BUILDING LOCATION</b>	<b>SAMPLE TYPE</b>	<b>ISDH ANALYTICAL RESULT</b>
A-001	Building Section A; IRF Warehouse; Floor	Gauze Wipe	NEGATIVE
A-002	Building Section A; IRF Warehouse; H-Rack	Culture Swab	NEGATIVE
A-003	Building Section A; IRF Warehouse; Pallet	Gauze Wipe	NEGATIVE
A-004	Building Section A; IRF Warehouse; Ceiling	Gauze Wipe	NEGATIVE
A-005	Building Section A; IRF Warehouse; Floor	Gauze Wipe	NEGATIVE
A-006	Building Section A; IRF Warehouse; H-Rack	Culture Swab	NEGATIVE
A-007	Building Section A; IRF Warehouse; Table	Gauze Wipe	NEGATIVE
A-008	Building Section A; IRF Warehouse; Door	Culture Swab	NEGATIVE
A-009	Building Section A; IRF Warehouse; Floor	Gauze Wipe	NEGATIVE
A-010	Building Section A; IRF Warehouse; Floor	Gauze Wipe	NEGATIVE
A-011	Building Section A; IRF Warehouse; H-Rack	Culture Swab	NEGATIVE
A-012	Building Section A; IRF Warehouse; H-Rack	Culture Swab	NEGATIVE
B-001	Building Section B; IRF Warehouse; Floor	Gauze Wipe	NEGATIVE
B-002	Building Section B; IRF Warehouse; H-Rack	Gauze Wipe	NEGATIVE
B-003	Building Section B; IRF Warehouse; Floor	Gauze Wipe	NEGATIVE
B-004	Building Section B; IRF Warehouse; H-Rack	Culture Swab	NEGATIVE
B-005	Building Section B; IRF Warehouse; Floor	Gauze Wipe	NEGATIVE
B-006	Building Section B; IRF Warehouse; Floor	Gauze Wipe	NEGATIVE
B-007	Building Section B; IRF Warehouse; Counter-top	Gauze Wipe	NEGATIVE
B-008	Building Section B; IRF Warehouse; H-Rack	Culture Swab	NEGATIVE
B-009	Building Section B; IRF Warehouse; Floor	Gauze Wipe	NEGATIVE
B-010	Building Section B; IRF Warehouse; H-Rack	Culture Swab	NEGATIVE
C-001	Building Section C; IRF Warehouse; floor	Gauze Wipe	NEGATIVE
C-002	Building Section C; IRF Warehouse; File Cabinet	Culture Swab	NEGATIVE
C-003	Building Section C; IRF Warehouse; H-Rack	Gauze Wipe	NEGATIVE
C-004	Building Section C; IRF Warehouse; Floor	Gauze Wipe	NEGATIVE

**PHASE II SAMPLE SUMMARY TABLE (Continued)**  
**DDD ANTHRAX FACILITY SITE**  
**BUILDING SECTIONS A THROUGH H**  
**SAMPLES COLLECTED NOVEMBER 6, 2001**

<b>SAMPLE IDENTIFICATION NO.</b>	<b>BUILDING LOCATION</b>	<b>SAMPLE TYPE</b>	<b>ISDH ANALYTICAL RESULT</b>
C-005	Building Section C; IRF Warehouse; Cold Air Return	Culture Swab	NEGATIVE
C-006	Building Section C; IRF Warehouse; H-Rack	Culture Swab	NEGATIVE
D-001	Building Section D; IRF Warehouse; Desk	Gauze Wipe	NEGATIVE
D-002	Building Section D; IRF Warehouse; Floor	Gauze Wipe	NEGATIVE
D-003	Building Section D; IRF Warehouse; Floor	Gauze Wipe	NEGATIVE
D-004	Building Section D; IRF Warehouse; Floor	Gauze Wipe	NEGATIVE
D-005	Building Section D; IRF Warehouse; Floor	Gauze Wipe	NEGATIVE
D-006	Building Section D; IRF Warehouse; Floor	Gauze Wipe	NEGATIVE
D-007	Building Section D; IRF Warehouse; Floor	Gauze Wipe	NEGATIVE
D-008	Building Section D; IRF Warehouse; Compactor	Culture Swab	NEGATIVE
D-009	Building Section D; IRF Warehouse; Compactor	Culture Swab	NEGATIVE
D-010	Building Section D; IRF Warehouse; Mini-blind	Culture Swab	NEGATIVE
D-011	Building Section D; IRF Warehouse; Floor Fan	Culture Swab	NEGATIVE
E-001	Building Section E; IRF Processing Area; Floor	Gauze Wipe	NEGATIVE
E-002	Building Section E; IRF Processing Area; Desk	Gauze Wipe	NEGATIVE
E-003	Building Section E; IRF Processing Area; Floor	Gauze Wipe	NEGATIVE
E-004	Building Section E; IRF Processing Area; Doorway	Gauze Wipe	NEGATIVE
E-005	Building Section E; IRF Processing Area; Desk	Gauze Wipe	NEGATIVE
E-006	Building Section E; IRF Processing Area; Floor	Gauze Wipe	NEGATIVE
E-007	Building Section E; IRF Processing Area; File Cabinet	Gauze Wipe	NEGATIVE
E-008	Building Section E; IRF Processing Area; Rack	Gauze Wipe	NEGATIVE
E-009	Building Section E; IRF Processing Area; Floor	Gauze Wipe	NEGATIVE
E-010	Building Section E; IRF Processing Area; Desk	Gauze Wipe	NEGATIVE
E-011	Building Section E; IRF Processing Area; Overhead	Gauze Wipe	NEGATIVE
E-012	Building Section E; IRF Processing Area; Instapack Machine	Culture Swab	NEGATIVE
E-013	Building Section E; IRF Processing Area; Desk	Culture Swab	NEGATIVE



**PHASE II SAMPLE SUMMARY TABLE (Continued)**  
**DDD ANTHRAX FACILITY SITE**  
**BUILDING SECTIONS A THROUGH H**  
**SAMPLES COLLECTED NOVEMBER 6, 2001**

<b>SAMPLE IDENTIFICATION NO.</b>	<b>BUILDING LOCATION</b>	<b>SAMPLE TYPE</b>	<b>ISDH ANALYTICAL RESULT</b>
F-001	Building Section F; IRF Receiving Area; Floor	Gauze Wipe	NEGATIVE
F-002	Building Section F; IRF Receiving Area; Floor	Gauze Wipe	NEGATIVE
F-003	Building Section F; IRF Receiving Area; Desk	Gauze Wipe	NEGATIVE
F-004	Building Section F; IRF Receiving Area; Floor	Gauze Wipe	NEGATIVE
F-005	Building Section F; IRF Receiving Area; Desk	Gauze Wipe	NEGATIVE
F-006	Building Section F; IRF Receiving Area; Drill Press	Gauze Wipe	NEGATIVE
F-007	Building Section F; IRF Receiving Area; Heating Duct	Gauze Wipe	NEGATIVE
F-008	Building Section F; IRF Receiving Area; Bathroom	Gauze Wipe	NEGATIVE
F-009	Building Section F; IRF Receiving Area; Floor	Gauze Wipe	NEGATIVE
F-010	Building Section F; IRF Receiving Area; Computer	Gauze Wipe	NEGATIVE
F-011	Building Section F; IRF Receiving Area; Copier	Gauze Wipe	NEGATIVE
F-012	Building Section F; IRF Receiving Area; Desk	Gauze Wipe	NEGATIVE
F-013	Building Section F; IRF Receiving Area; Cart	Gauze Wipe	NEGATIVE
F-014	Building Section F; IRF Receiving Area; Cold Air Return	Gauze Wipe	NEGATIVE
F-015	Building Section F; IRF Receiving Area; Heating Duct	Culture Swab	NEGATIVE
F-016	Building Section F; IRF Receiving Area; Payphone	Culture Swab	NEGATIVE
F-017	Building Section F; IRF Receiving Area; Floor	Culture Swab	NEGATIVE
G-001	Building Section G; IRF Tech Area; Desk	Culture Swab	NEGATIVE
G-002	Building Section G; IRF Tech Area; Desk	Gauze Wipe	NEGATIVE
G-003	Building Section G; IRF Tech Area; Rack	Gauze Wipe	NEGATIVE
G-004	Building Section G; IRF Tech Area; Floor	Gauze Wipe	NEGATIVE
G-005	Building Section G; IRF Tech Area; Cold Air Return	Culture Swab	NEGATIVE
G-006	Building Section G; IRF Tech Area; Desk	Culture Swab	NEGATIVE
G-007	Building Section G; IRF Tech Area; Cold Air Return	Culture Swab	NEGATIVE
G-008	Building Section G; IRF Tech Area; Mini-blind	Culture Swab	NEGATIVE
H-001	Building Section H; RCP Area; Mini-blind	Gauze Wipe	NEGATIVE

**PHASE II SAMPLE SUMMARY TABLE (Continued)**  
**DDD ANTHRAX FACILITY SITE**  
**BUILDING SECTIONS A THROUGH H**  
**SAMPLES COLLECTED NOVEMBER 6, 2001**

<b>SAMPLE IDENTIFICATION NO.</b>	<b>BUILDING LOCATION</b>	<b>SAMPLE TYPE</b>	<b>ISDH ANALYTICAL RESULT</b>
H-002	Building Section H; RCP Area; Floor Wipe	Gauze Wipe	NEGATIVE
H-003	Building Section H; RCP Area; Vacuum Wipe	Gauze Wipe	NEGATIVE
H-004	Building Section H; RCP Area; Rack	Gauze Wipe	NEGATIVE
AIR-01	Building Section A; IRF Warehouse, Northwestern Area	Air Sample	NEGATIVE
AIR-02	Building Section A; IRF Warehouse, Southeastern Area	Air Sample	NEGATIVE
AIR-03	Building Section B; IRF Warehouse, Southeastern Area	Air Sample	NEGATIVE
AIR-04	Building Section B; IRF Warehouse, North-Northwestern Area	Air Sample	NEGATIVE
AIR-05	Building Section B; IRF Parts Room, Center	Air Sample	NEGATIVE
AIR-06	Building Section C; North-Northwestern Area	Air Sample	NEGATIVE
AIR-07	Building Section D; IRF NRFI Receiving Area near Compactor	Air Sample	NEGATIVE
AIR-08	Building Section D; IRF Parts Room	Air Sample	NEGATIVE
AIR-09	Building Section E; IRF Processing, North-Central Area	Air Sample	NEGATIVE
AIR-10	Building Section E; IRF Third Party, North-Northwestern Area	Air Sample	NEGATIVE
AIR-11	Building Section E; IRF Monitoring Area	Air Sample	NEGATIVE
AIR-12	Building Section F; IRF Receiving	Air Sample	NEGATIVE
AIR-13	Building Section F; IRF Tech Room	Air Sample	NEGATIVE
AIR-14	Building Section F; Break Room	Air Sample	NEGATIVE
AIR-15	Building Section G; IRF Tech Room	Air Sample	NEGATIVE
C-1	Gauze Wipe Sample Control (dry)	Gauze Wipe	NEGATIVE
C-2	Gauze Wipe Sample Control (wet)	Gauze Wipe	NEGATIVE
S-1	Culture Swab Control	Culture Swab	NEGATIVE

## LIST OF WITNESSES

Steve Renninger, On-Scene Coordinator  
United States Environmental Protection Agency  
Emergency Response Branch  
26 West Martin Luther King Drive, Office B-2  
Cincinnati, OH 45268  
(513) 569-7539

Brad Stimple, On-Scene Coordinator  
United States Environmental Protection Agency  
Emergency Response Branch  
77 West Jackson Boulevard  
Chicago, IL 60604  
(312) 886-0406

John Sherrard, START Project Manager  
Tetra Tech EM Inc.  
250 West Court Street, Suite 200 West  
Cincinnati, OH 45202  
(513) 241-0149

David Daugherty, On-Scene Coordinator  
Indiana Department of Environmental Management  
Emergency Response Compliance and Response Branch  
2525 North Shadeland Avenue  
P.O. Box 6015  
Indianapolis, IN 46206-6015  
(317) 308-3030

Hans Messersmith, Director  
Indiana State Department of Health  
2 North Meridian Street, Section 3D  
Indianapolis, IN 46204  
(317) 233-7861

Matthew Matusiak, Administrator  
Marion County Health Department  
3838 North Rural Street  
Indianapolis, IN 46205  
(317) 221-4670